- 1. Start IFPS from an AWIPS workstation
- 2. Traffic Lights:
 - a. what is the meaning of each light?
 - b. understand where databases originate when you click on an icon on the main menu
 - c. Be able to manipulate the lights to force the direction of data flow
- 3. From the IFPS main menu, start the GFE
- 4. Properly exit the IFPS

- 1. Identify the components of the GFE display:
 - a. Main menu bar
 - b. Button bar
 - c. Time scale
 - d. Grid manager
 - e. Spacial editor
 - f. Temporal editor
 - g. Status bar
- 2. Draw down the sub menus off the main menu bar to get an idea of what is on the sub menus
- 3. Switch between the spatial editor and grid manager windows
- 4. Toggle the Grid Manager window between displaying across the top and down the side of the GFE window.
- 5. Familiarize yourself with the Spatial Editor control functions:
 - a. select a weather element as a graphic
 - b. switch graphic display to an image
 - c. make the image displayed editable
 - d. loop the display
 - e. toggle through the legends
 - f. make a grid visible and editable through the grid manager
 - g. zoom in on a selected area of the displayed map

- 1. From the weather element browser:
 - a. load in several elements of your choosing into the forecast database.
 - b. load in the same elements, but also display a D2D model element.
- 1. a. Create a new weather element group consisting of wind, temperature and dewpoint
 - b. Load the new weather element group from the weather element group menu
 - c. Delete the new weather element group
- 2. a. Create a procedure to load the MesoEta model through 24 hours, and the AVN to 120 hours.
 - b. Run the procedure.
 - c. Delete the procedure.
- 4. Copy the ETA model into the forecast database using the copy all grids function
- 5. Copy the AVN wind field into the forecast database just for tomorrow using the copy selected grids function.
- 6. Load in the temperature grids from the NGM. Using these grids, practice using the functions from the Grids drop down menu:
 - a. interpolate
 - b. delete grids
 - c. split grids
 - d. stretch a grid (click and drag with the middle mouse button)
 - e. fragment grids
 - f. assign default value
 - g. time shift weather elements
 - h. can you do any of these functions without using the Grids drop down menu?

- 1. Using the Draw Edit Area tool
 - a. manually draw an edit area
 - b. create an edit area that is the union of two edit areas
 - c. create an edit area that is the intersection of two edit areas
 - d. remove a portion of an edit area with the Clear button
 - e. invert an edit area with the Toggle button
- 2. a. Draw an edit area, then save it as a quickset
 - b. Clear the edit area
 - c. Recall the edit area from the quickset
- 3. From the Query Dialogue
 - a. display the edit area for Oregon zone 3
 - b. display the edit areas for PZZ210, PZZ250 and ORZ001 together
 - c. create an edit area for Temperatures less than 40 (hint: be sure to have displayed on the spatial editor a T field with temps both above and below 40 degrees)
 - d. create an intersection of the field created in c., with Topography (topo) >1000 feet.
- 4. Using the Sample Points tool, with a weather element displayed in the spatial editor
 - a. Left click and drag the mouse across the weather field to display sampling
 - b. left click on several spots on the display to leave stationary sample points
 - c. middle button click on a point to remove it
 - d. delete all sample points through the Maps>Samples drop down menu
 - e. display a previously named sample set
- 5. From a blank grid using the contour tool
 - a. selecting values off the color bar, and draw several new contour
 - b. adjust one of the contours using a click and drag with the middle mouse button
 - c. delete one contour with a click of the middle mouse button
 - d. calculate new grid (click right mouse button)
- 6. With a scalar grid displayed, use the pencil tool
 - a. to draw new positions for several contours
 - b. Modify the width of the pencil tool with the right mouse button drop down menu
 - c. Try the pencil tool on a vector field like wind
 - d. Try the pencil tool on the Weather field
- 7. Adjust the spacial position of a field using the Move/Copy tool (note the difference between using the left and middle mouse buttons)

Exercises and proficiency items (continued)

- 8. With an image displayed in the spacial editor, adjust the color bar to fit to data, then switch it back to the default range
- 9. Using a variety of editable weather elements, run a few smart tools from the Edit Actions dialogue. Be sure to set Pickup Value, Delta Value, etc for tools requiring them, and also be sure tools that utilize other weather fields have those accessible.